

January 10, 2020

Mr. Marc Holma  
State Historic Preservation Office  
Department of Historic Resources  
2801 Kensington Avenue  
Richmond, VA 23221

RE: Proposed Dominion Solar Farm Development  
Washington Dulles International Airport  
Loudoun and Fairfax Counties, Virginia

Dear Mr. Holma:

The Metropolitan Washington Airports Authority (Airports Authority) hereby requests your review of the proposed Dominion Solar Farm Development project at Washington Dulles International Airport (IAD). The Airports Authority has been approached by Dominion Power to lease approximately 1,600 acres of airport property for the development of an extensive solar farm (Figures 1 & 2). The proposed solar farm would be located to the south and west of the existing Cross-wind Runway, with a layout surrounding the planned 5<sup>th</sup> Runway (Figure 3). Dominion Power has requested a short-term lease (three years and two months) to conduct a feasibility study for the construction, installation, operation and maintenance of a solar power generating facility.

Should the feasibility study prove positive, Dominion Power would then enter a long-term 35-year lease to continue to operate and build-out the facilities. As the project has the potential to effect on-airport archaeological resources and both on-airport and off-airport historic architectural resources, the Airports Authority is proposing a comprehensive cultural resources survey of the project's proposed Area of Potential Effect (APE). This letter provides: 1) a summary of these prior investigations, and 2) the scope and methodology of the proposed additional investigations.

We make this request pursuant to the 1987 Programmatic Memorandum of Agreement (PA) among the United States Department of Transportation, the Virginia State Historic Preservation Office (VASHPO), and the Advisory Council on Historic Preservation (ACHP). In addition, this consultation document is intended to address the environmental analysis and recordation requirements related to the Section 102(c) of the National Environmental Policy Act of 1969 (as amended) and Section 4(f) of the Department of Transportation Act.



## **1.0 PROJECT DESCRIPTION**

As part of the early planning process, Dominion Power has developed a preliminary plan of the proposed solar facility (Figure 3) showing a proposed layout of substation/switchyard, transmission lines and proposed series of solar panel arrays to be installed sequentially through time. To assess the potential effects of the proposed projects, the Airports Authority is proposing a comprehensive cultural resources survey of the full APE.

## **2.0 AREA OF POTENTIAL EFFECTS**

For archaeological resources the APE is defined as the anticipated Limits of Disturbance (LOD) for all construction-related activities, while the APE for architectural resources also considers additional potential effects to off-airport resources. The design is preliminary at this time but some of the concepts being carried forward include: 1) large scale solar panel arrays utilizing low level angled mounts, and 2) a limited number of utility support structures including inverter stations, substations and switch yards (see Figure 4 for example panels and installation structures).

Given the low vertical profile of the proposed solar facilities, the undertaking would appear to have a limited potential to effect off-airport historic architectural resources. To take these potential effects into consideration, the Airports Authority is proposing a comprehensive survey within a 0.5-mile buffer extended out from the proposed LOD (Figure 5). The solar farm is anticipated to have a similar structure and appearance as the examples attached. However, the design is still in the preliminary stages. As the project advances towards final design, details will be shared with VDHR in further coordination and consultation.

## **3.0 HISTORIC ARCHITECTURAL RESOURCES**

A significant portion of the current project APE, has been the subject of previous archaeological and architectural survey efforts, including investigations associated with the Western Lands Area (WLA). Located north of the proposed solar farm location, the WLA was subjected to a comprehensive cultural resources survey and agency consultation as part of the environmental studies associated with a proposed third-party development of the property (VDHR # 2016-0178). In addition to combined Phase I/II survey of the LOD for the WLA project, there was a survey for both on-airport and off-airport architectural resources.

As the WLA development plan included provisions for new substantial multi-story structures, the APE for architectural resources included a one-mile buffer extending out from the project LOD (Figure 5). This APE was found to contain a total of seventeen (17) previously recorded resources; however, except for a portion of the Dulles Airport Historic District, all these resources were determined not eligible for the NRHP (or had been demolished since being recorded). The WLA development area was located more than a mile from the closest contributing element of the airport historic district and would have no effect.

The survey recorded an additional eight (8) new structural complexes predating 1966 that were evaluated for NRHP eligibility. These resources represent modest residential properties of common vernacular styles built between 1920 and 1960. Included in this same general time period are the partial structural remains of a large farm. None of these resources were found to meet the criterion of eligibility for the NRHP, with the staff of the VDHR concurring with these determinations (28 March 2017). This concurrence also concluded that the WLA would have no effect on any on-airport or off-airport architectural resources. With prior architectural surveys covering the areas to the north and east, the solar farm architectural survey will focus on the property parcel in the APE buffer to the south and west (Figure 5). Current Virginia - Cultural Resources Information System data (V-CRIS accessed 14 November 2019) indicates that there are a total of forty-three (43) previously recorded architectural resources within the 0.5-mile APE for the solar farm project.

<b>DHR ID</b>	<b>Resource Name</b>	<b>Eligible?</b>
053-6146	Palmer Family Cemetery, North of US 50	No
053-6086	House, 43461 Old Ox Rd (Rte. 606)	No
053-1122	South Riding Property, Rte. 50, Site 1, 43290 John Mosby Hwy	No
053-0966	Barn, Rte. 50	No
053-5693	House, 43228 Old Ox Rd	No
053-5664	House, 42679 John Mosby Hwy	Destroyed
053-5669	House, 25047 Elk Lick Rd	No
053-5671	House, 25061 Elk Lick Rd	No
053-0008	Dulles International Airport Historic District	Yes
053-6118	House, 42954 Arcola Rd	No
053-5670	House, 25055 Elk Lick Rd	No
053-6018	House, 25077 Elk Lick Rd	No
053-5691	House, 42954 Arcola Rd	No
053-5672	House, 25072 Elk Lick Rd	No
053-5894	House, 43091 John Mosby Hwy	No
053-5895	House, 43107 John Mosby Hwy	No
053-5668	House, 25039 Elk Lick Rd	No
053-5896	BJ's Crab Shack, 43137 John Mosby Hwy	No
053-6028	Building, 43073 John Mosby Hwy	No
053-6043	House, 24927 Shady Grove Ln	No
053-6302	House, 25289 Evergreen Mills Rd (Rte. 621)	No
053-6303	House, 25285 Evergreen Mills Rd (Rte. 621)	No
053-6304	House, 25269 Evergreen Mills Rd (Rte. 621)	No
053-6044	House, 24932 Shady Grove Ln	No
053-6340	Bridge #6429 (Culvert, Old Ox Rd/Rte. 606, Cabin Branch)	No
053-6341	Bridge #6451 (Culvert, Old Ox Rd/Rte. 606, tributary Broad Run)	No
053-6305	House, 25247 Evergreen Mills Rd (Rte. 621)	No
053-6306	House, 42911 Arcola Rd	No

DHR ID	Resource Name	Eligible?
053-6042	House, 42953 John Mosby Hwy (Rte. 50)	Destroyed
053-5667	House, 24905 Shady Grove Ln	No
053-6316	House, 43149 John Mosby Hwy (Rte. 50)	No
053-6317	House, 25557 Vance Rd (Rte. 621)	No
053-6318	House, Vance Rd (Rte. 621)	No
053-6319	House, 25471 Vance Rd (Rte. 621)	No
053-6320	House, 25445 Vance Rd (Rte. 621)	No
053-6321	Office Building, 43045 John Mosby Hwy (Rte. 50)	No
053-6322	Workshop, 24900 Riding Place	No
053-6325	House, 25195 Evergreen Mills Rd (Rte. 621)	No
053-6326	House, 25173 Evergreen Mills Rd (Rte. 621)	No
053-6327	House, 25137 Evergreen Mills Rd (Rte. 621)	No
053-6328	House, 25119 Evergreen Mills Rd (Rte. 621)	No
053-6323	House, 25227 Evergreen Mills Rd (Rte. 621)	No
053-6324	House, 25213 Evergreen Mills Rd (Rte. 621)	No

It is anticipated there will not be a significant number of potentially eligible resources to evaluate given the relatively late historic development of areas west and south of the airport. Those that are will be recorded using the standard VDHR Reconnaissance-level Survey Form and entered in the V-CRIS system.

### 3.0 ARCHEOLOGICAL RESOURCES

Significant portions of the anticipated LOD for the solar farm development have been the subject of prior archeological survey efforts, specifically the investigations associated with the 4<sup>th</sup> and 5<sup>th</sup> Runway Environmental Impact Statement (VDHR #1990-0460). In addition, prior surveys recorded and evaluated three (3) archaeological sites that now fall within the solar farm LOD. All three of these sites were determined not eligible for the NRHP.

VDHR #	Period of Occupation	Eligible?
44LD1088	Prehistoric (Unknown)	No
44LD1089	Prehistoric (Early Archaic)	No
44LD1090	Prehistoric (Unknown) – Historic (19 <sup>th</sup> -20 <sup>th</sup> Cent.)	No

The Phase I archaeological survey for the runway development included approximately 1,079.24 acres that now fall within the proposed solar farm LOD. Consequently, there are only four (4) separate areas, totaling approximately 329 acres, that require additional archaeological survey (Figure 6). The Airports Authority is recommending a comprehensive Phase I archaeological survey of these remaining areas to identify any archaeological sites that would need to be evaluated for the NRHP. The archaeological potential of these areas would be considered relatively high for both prehistoric and historic resources to be discovered, given the number of

well-developed stream systems within the survey areas, as well as the location of several historic residential/farm structures identified through historic land records (Figure 7).

## 5.0 CONCLUSIONS

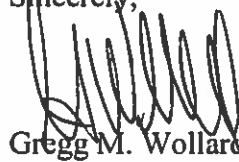
As outlined above, the Airports Authority is proposing a comprehensive cultural resources survey of the APE for the proposed Dominion Solar Farm Development project at IAD. This will include:

- 1) Historic architectural survey for previously unrecorded resources that fall within a 0.5-mile APE buffer of the project LOD;
- 2) Phase I archaeological survey of all previously unsurveyed portions of the solar farm LOD.

Based on results of the survey efforts, the Airports Authority will then continue to consult with VDHR (and all appropriate consulting parties) to: 1) assess the NRHP eligibility of the resources identified and recorded during the current projects, and 2) assess the potential effects of the proposed project on any eligible resources. It is anticipated that project consultation will continue as the project feasibility study is conducted and potential planning/design details are developed.

My staff and I would be pleased to provide you with any additional information or documentation on this project should you have questions. Please feel free to contact Tom Wasaff if he can be of any assistance. He can be reached at (703) 572-0268 or Thomas.Wasaff@MWAA.com. Thank you once again for assisting the Authority in its continuing efforts to preserve the historic resources of the Metropolitan Washington Airports.

Sincerely,



Gregg M. Wollard, P.E., A.A.E.  
Manager, Planning Department Engineering

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cc: Susan Stafford, FAA Washington ADO  
Sarah Stockley, Advisory Council on Historic Preservation  
Mr. Henry Ward, WSP

Enclosures:



## **STATEMENT OF CONCURRENCE**

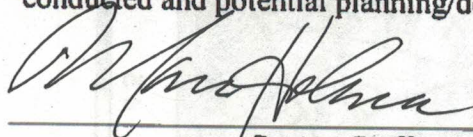
As a certified representative of the Virginia State Historic Preservation Officer, I have reviewed the attached project documentation for the proposed Solar Farm Development at Washington Dulles International Airport and concur with the cultural resources survey and agency consultation process outlined below.

Concurrence with this determination demonstrates the Airports Authority's compliance with the terms of the 1987 Programmatic Memorandum of Agreement [as it regards Section 106 of the National Historic Preservation Act (36 CRF Part 800) and Section 4(f) of the Department of Transportation Act (23 U.S.C. 138)]. By my signature, the Metropolitan Washington Airports Authority is authorized to proceed with the project as described.

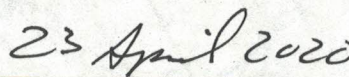
1. The Airports Authority has been approached by Dominion Power to lease approximately 1,600 acres of airport property for the development of an extensive solar farm.
2. Dominion Power has requested a short-term lease (three years and two months) to conduct a feasibility study for the construction, installation, operation and maintenance of a solar power generating facility.
3. Should the feasibility study prove positive, Dominion Power would then enter a long-term 35-year lease to continue to operate and build out the facilities.
4. As the project has the potential to effect on-airport archaeological resources and both on-airport and off-airport historic architectural resources, the Airports Authority is proposing a comprehensive cultural resources survey of the project's proposed Area of Potential Effect (APE).
5. While the design for the solar farm will continue to be developed throughout the planning process and feasibility study, it is anticipated to represent: 1) large scale solar panel arrays utilizing low level angled mounts, and 2) a limited number of utility support structures including inverter stations, substations and switch yards.
6. Given the low vertical profile of the proposed solar facilities, the undertaking would appear to have a limited potential to affect off-airport historic architectural resources. To take these potential effects into consideration, the Airports Authority is proposing a comprehensive survey within a 0.5-mile buffer extended out from the proposed LOD.
7. Significant portions of the anticipated LOD for the Solar Farm development have been the subject of prior archeological survey efforts, specifically the investigations associated with the 4<sup>th</sup> and 5<sup>th</sup> Runway Environment Impact Statement (VDHR #1990-0460).
8. In addition to the archaeological 4<sup>th</sup>/5<sup>th</sup> Runway survey work, prior airport archaeological surveys also recorded and evaluated three (3) archaeological sites that now fall within the solar farm LOD. All three of these sites were determined to be not eligible for the NRHP.



9. The Phase I archaeological survey for the runway development included approximately 1,079.24 acres of the proposed solar farm LOD. Consequently, there are only four (4) separate survey areas that will require additional archaeological survey, totaling approximately 329 acres.
10. The Airports Authority is recommending a comprehensive Phase I archaeological survey of these remaining areas to identify any archaeological sites that would need to be evaluated for the NRHP.
11. It is anticipated that project consultation will continue as the project feasibility study is conducted and potential planning/design details for the facility are developed.



Review Staff



Date

2020-0024

VASHPO / DHR Project No.



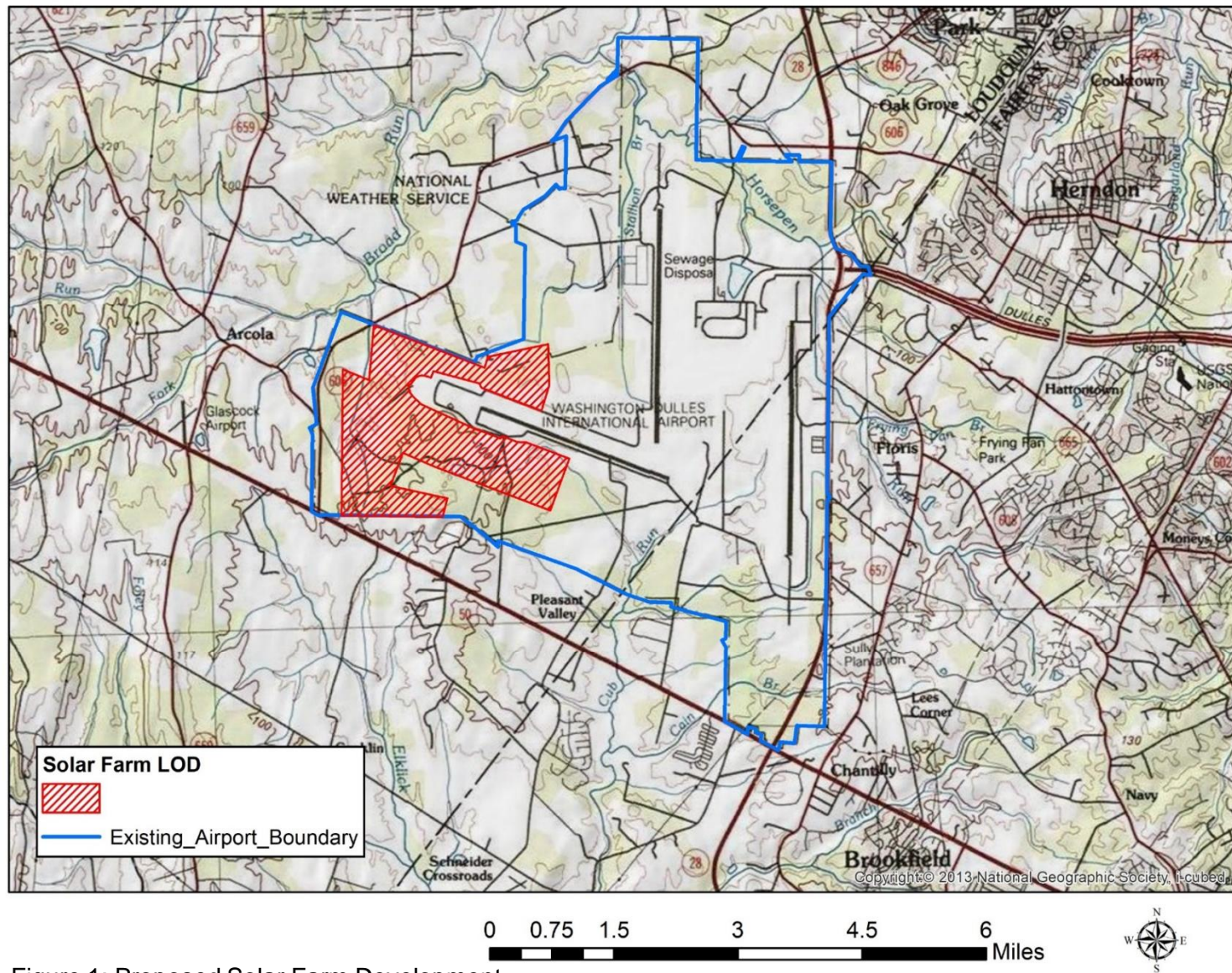


Figure 1: Proposed Solar Farm Development  
Project Location – Limits of Disturbance  
Washington Dulles International Airport, Fairfax and Loudon Counties





Figure 2: Proposed Solar Farm Development  
Project Location – Limits of Disturbance  
Washington Dulles International Airport, Fairfax and Loudon Counties

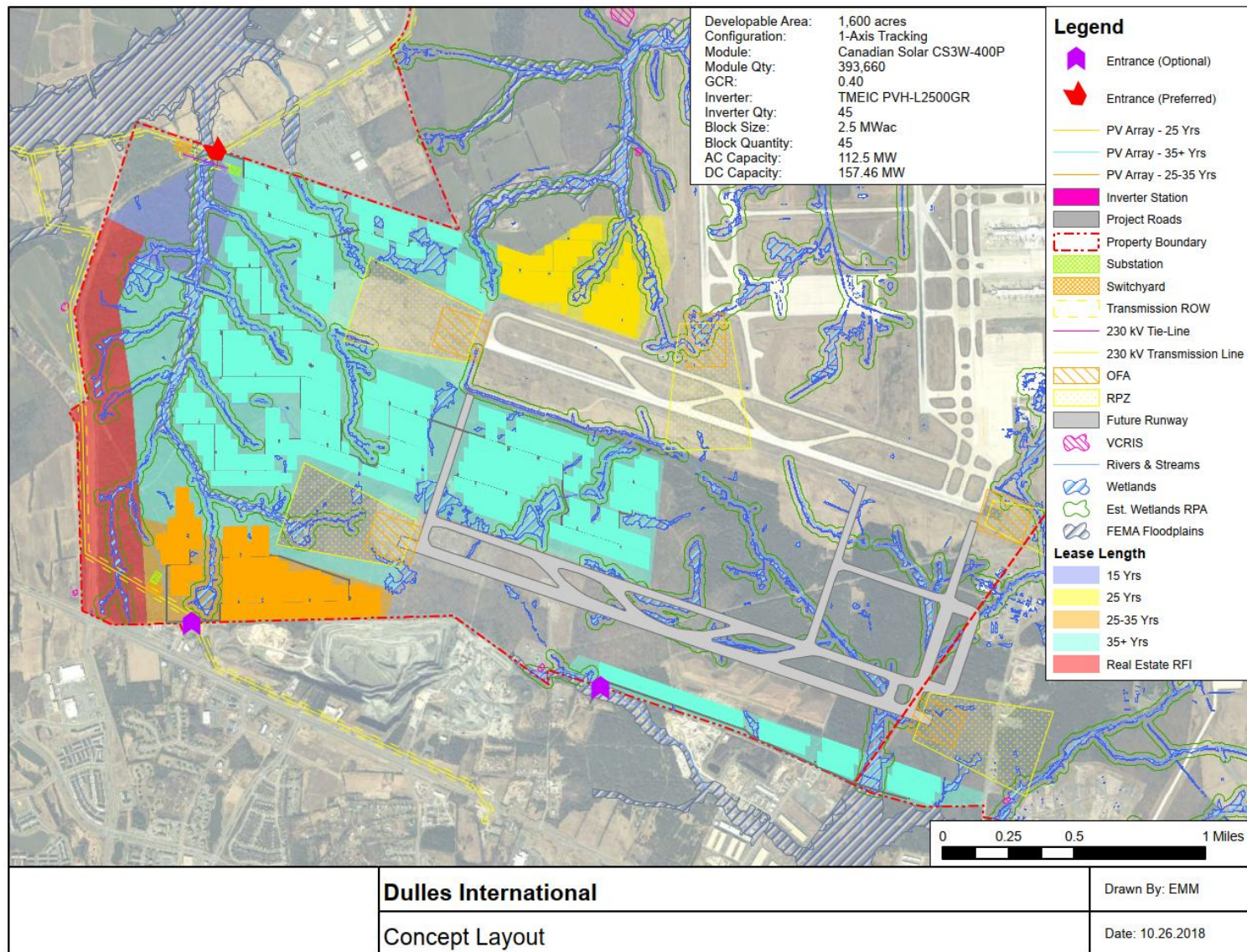


Figure 3: Proposed Solar Farm Development  
 Project Location – Preliminary Concept Layout  
 Washington Dulles International Airport, Fairfax and Loudon Counties



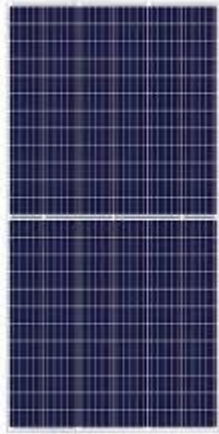


Figure 4: Proposed Solar Farm Development  
Proposed Solar Panel (Upper Left) and Examples of Standard Installations  
(Invertor Station Lower Left and Electrical Substation Lower Right)  
Washington Dulles International Airport, Fairfax and Loudon Counties



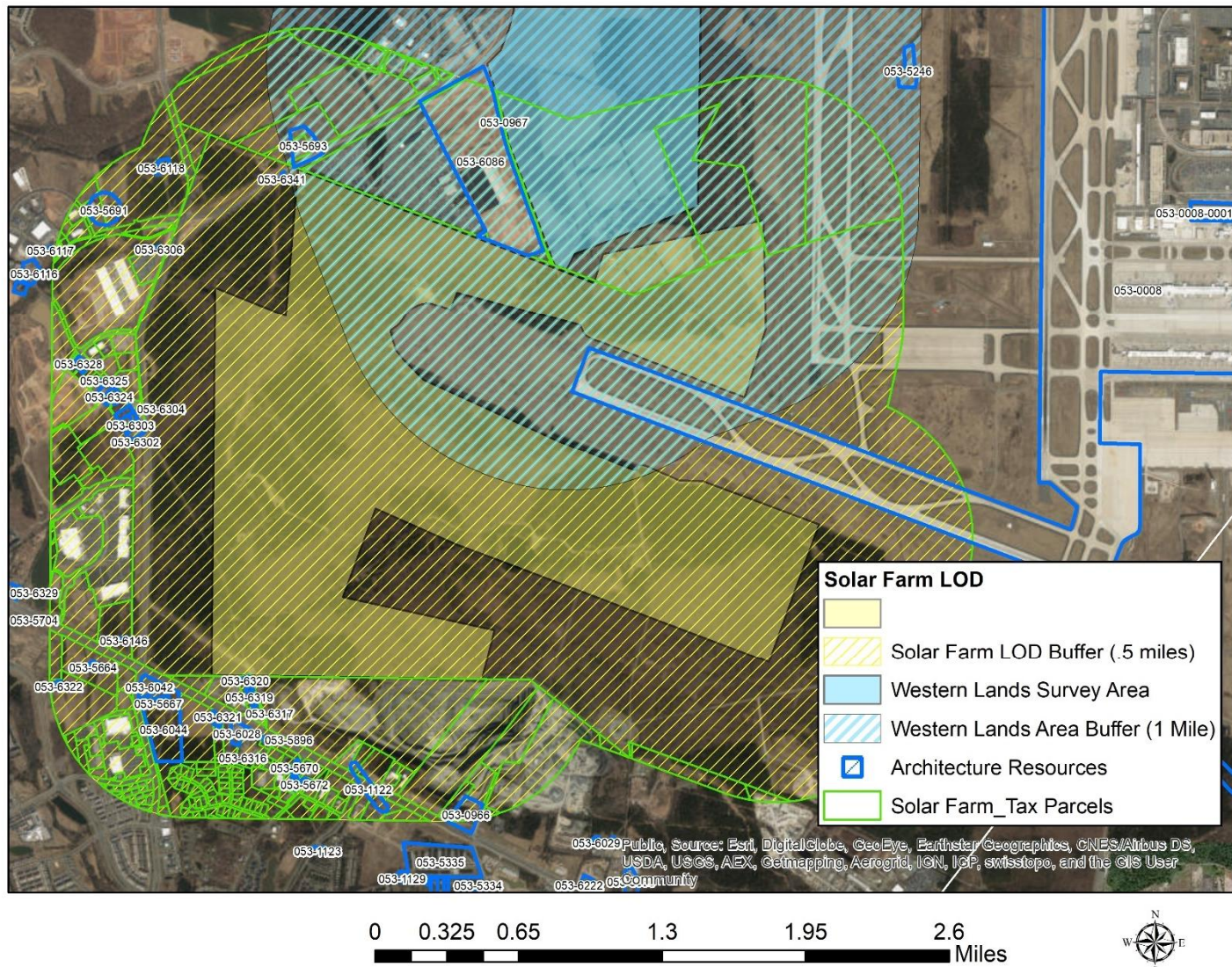


Figure 5: Proposed Solar Farm Development  
 Prior Historic Architectural Survey Coverage and Additional Architectural Survey Areas  
 Washington Dulles International Airport, Fairfax and Loudon Counties



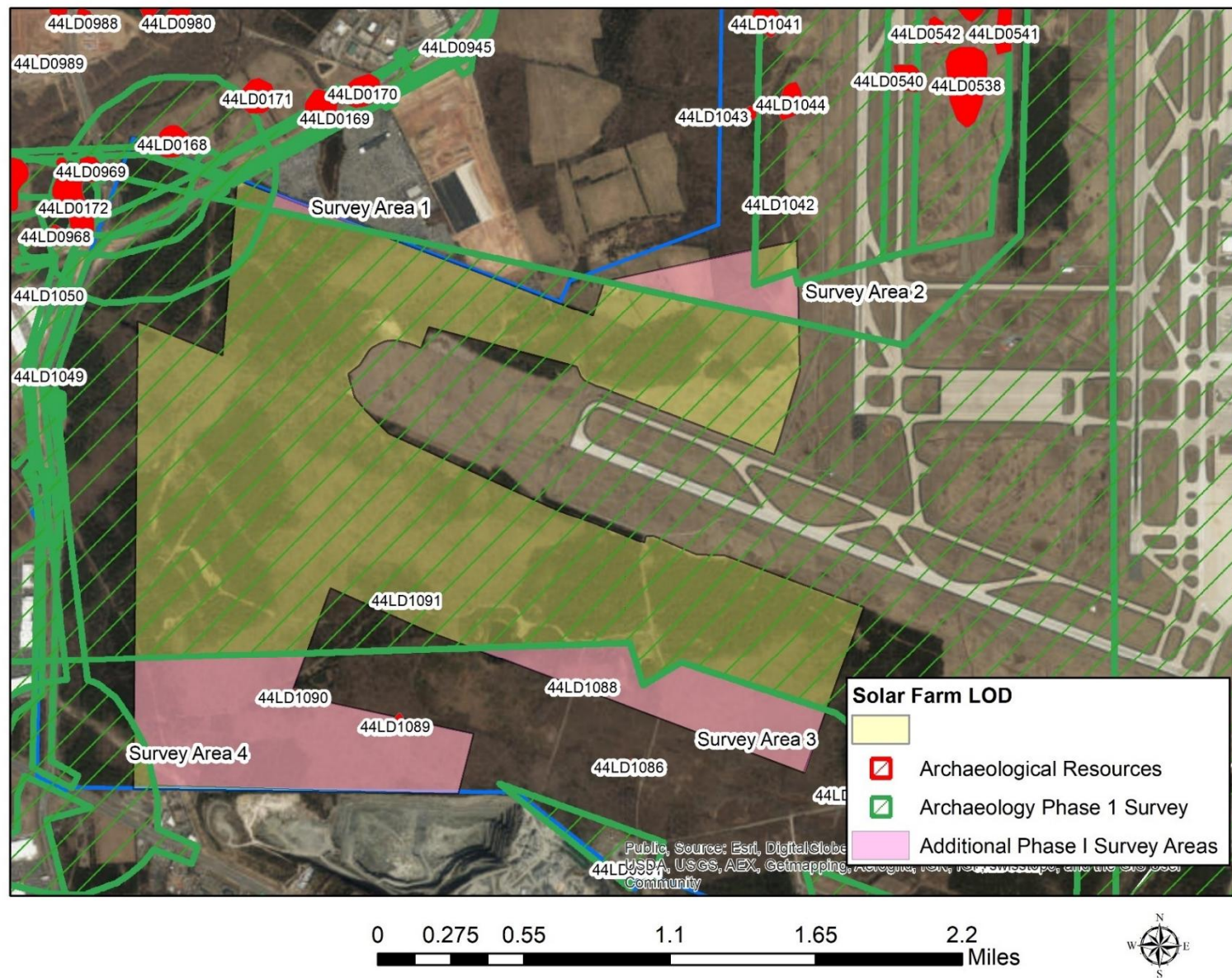


Figure 6: Proposed Solar Farm Development  
 Prior Archaeological Survey Coverage – Additional New Phase I Survey Areas 1-4  
 Washington Dulles International Airport, Fairfax and Loudon Counties



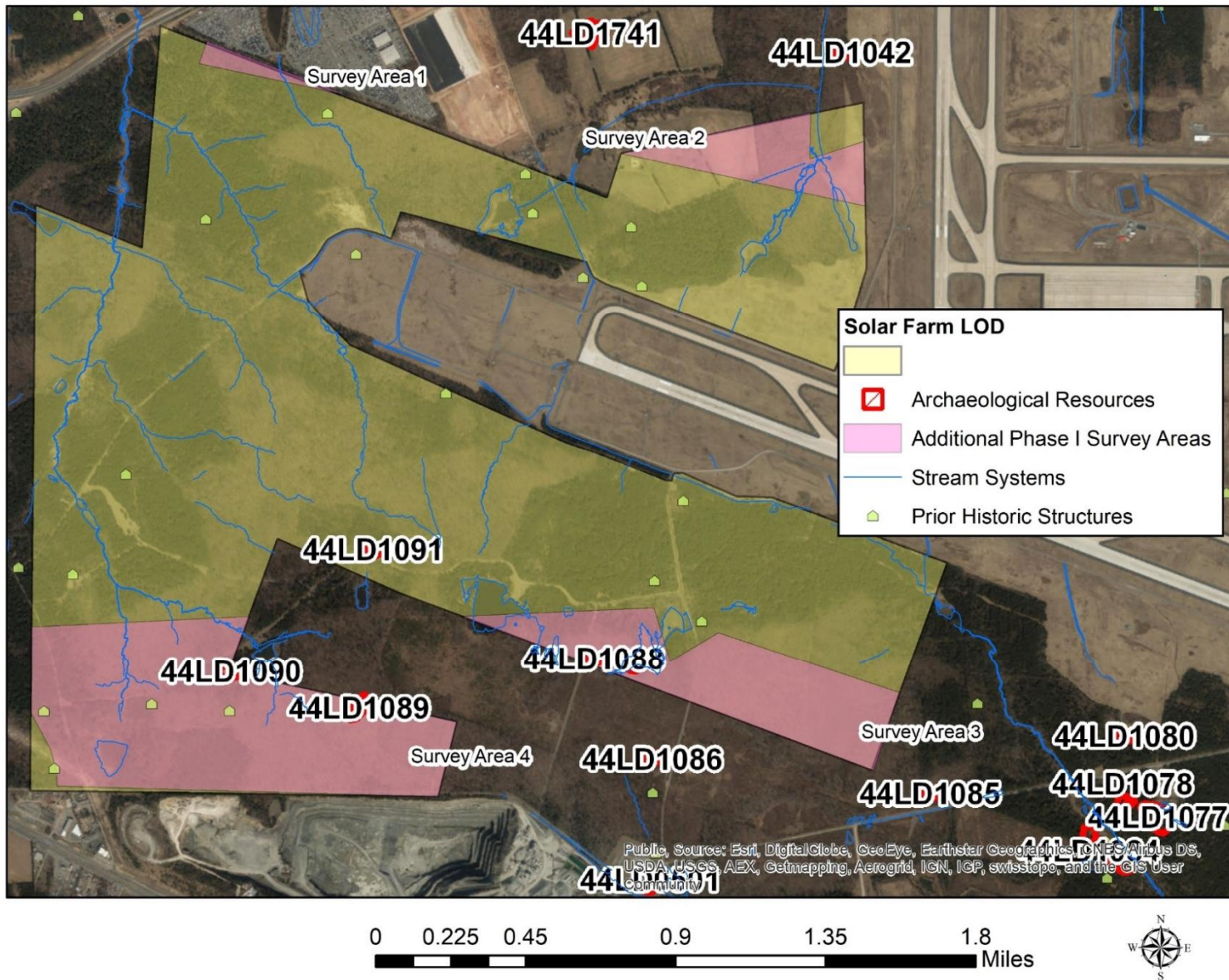


Figure 7: Proposed Solar Farm Development  
 Additional New Phase I Survey Areas – Stream Systems and Prior Historic Structures  
 Washington Dulles International Airport, Fairfax and Loudon Counties